Cambridge Senior General Mathematics AC/VCE Units 1 & 2 Chapter 4 Financial arithmetic: **Skillsheet 4C**

- 1 Find the rate of simple interest (correct to one decimal place) in each of the following situations:
 - **a** \$10 000 increases to \$12 000 in two years
 - **b** \$5300 invested for five years and earning \$2119 interest
 - c \$620 invested for one year and earning \$24.80 interest
 - d \$200 500 invested for two-and-a-half years and earning \$30 075 interest
 - e \$150 invested for 18 months and earning \$7.88 interest
 - f \$1125 invested for four years and 3 months and earning \$262.97 interest
- 2 Find the number of years taken for the following investments (correct to one decimal place) to earn the stated amounts of simple interest:
 - **a** \$10 000 at 5% per annum earns \$1500
 - **b** \$20 000 at 6% per annum earns \$3000
 - c \$2400 at 12% per annum earns \$864 interest
 - **d** \$700 at 5% per annum earns \$140 interest
 - e \$1000 at 7.5% per annum earns \$112.50 interest
 - **f** \$72 500 at 7.25% per annum earns \$21 025 interest
- **3** How much should be invested to earn the interest stated over the period given in each of the following? Give you answers correct to the nearest dollar.
 - **a** Interest of \$1000 at a simple interest rate of 5% per annum over five years
 - **b** Interest of \$700 calculated at 7% per annum simple interest over four years
 - c Interest of \$15 000 calculated at 3% per annum simple interest over five years
 - d Interest of \$22 500 calculated at 4% per annum simple interest over five years
 - e Interest of \$10 500 calculated at 3% per annum simple interest over 42 months
 - f Interest of \$22 500 calculated at 4% per annum simple interest over 18 months
- 4 How much should be invested to achieve the investment stated over the period given in each of the following? Give you answers correct to the nearest dollar.
 - **a** The amount of \$12 300 if the principal is invested at a simple interest rate of 5% per annum for five years
 - **b** The amount of \$33 600 if the principal is invested at a simple interest rate of 4% per annum for five years



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- **c** The amount of \$53 000 if the principal is invested at a simple interest rate of 3% per annum for two years
- **d** The amount of \$100 000 if the principal is invested at a simple interest rate of 8% per annum for two years



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Answers for Chapter 4 Skillsheet 4C

- **1 a** 10%
 - **b** 8%
 - **c** 4%
 - **d** 6%
 - **e** 3.5%
 - **f** 5.5%
- **2 a** 3 years
 - **b** 2.5 years
 - **c** 3 years
 - **d** 4 years
 - e 1.5 years
 - **f** 4 years
- **3 a** \$4000
 - **b** \$2500
 - **c** \$100 000
 - **d** \$112 500
 - **e** \$100 000
 - **f** \$375 000
- **4 a** \$9840
 - **b** \$28 000
 - **c** \$50 000
 - **d** \$86 207